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Repeated geophysical surveys for the preservation of architectural monuments

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Abstract

This paper describes the methodology and results of the geophysical monitoring conducted within the architectural buildings as well as the newly discovered opportunities to use highprecision gravimeter survey and transient electromagnetic sounding for studying active geological processes immediately below the buildings and constructions. By the example of the Kazan Kremlin, the paper shows how the damaged parts of basements of the architectural monuments, deformed or broken by the action of underground water, can be effectively located using geophysical monitoring.
